

REMARKS

Claims 1-7 are pending in the present application and favorable action on the merits is earnestly solicited at present.

Claim Rejections under 35 U.S.C. § 103(a)

Claims 1-3, 5, 6, and 7 are rejected under 35 U.S.C. § 103(a) as being unpatentable over **Isozaki et al. US '960** (US 2004/0089960) in view of **Matsumoto et al. JP '827** (JP 2001-311827).

Claim 4 is rejected under 35 U.S.C. § 103(a) as being unpatentable over **Isozaki et al. US '960** in view of **Matsumoto et al. JP '827** as applied to claim 1 and further in view of **Tsuchimoto et al. US '939** (US 2003/0197939).

Reconsideration and withdraw of each of the above rejections is respectfully requested based on the following considerations.

Legal Standard for Determining Prima Facie Obviousness

MPEP § 2141 sets forth the guidelines in determining obviousness. First, the Examiner has to take into account the factual inquiries set forth in *Graham v. John Deere*, 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), which has provided the controlling framework for an obviousness analysis. The four *Graham* factors are:

- (a) determining the scope and content of the prior art;
- (b) ascertaining the differences between the prior art and the claims in issue;
- (c) resolving the level of ordinary skill in the pertinent art; and
- (d) evaluating any evidence of secondary considerations.

Graham v. John Deere, 383 U.S. 1, 17, 148 USPQ 459, 467 (1966).

Second, the Examiner has to provide some rationale for determining obviousness. MPEP § 2143 sets forth some rationales that were established in the recent decision of *KSR International Co. v Teleflex Inc.*, 82 USPQ2d 1385 (U.S. 2007). Exemplary rationales that may support a conclusion of obviousness include:

- (a) *combining prior art elements according to known methods to yield predictable results;*
- (b) *simple substitution of one known element for another to obtain predictable results;*
- (c) *use of known technique to improve similar devices (methods, or products) in the same way;*
- (d) *applying a known technique to a known device (method, or product) ready for improvement to yield predictable results;*
- (e) *“obvious to try” – choosing from a finite number of identified, predictable solutions, with a reasonable expectation of success*
- (f) *known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces if the variations are predictable to one of ordinary skill in the art;*
- (g) *some teaching, suggestion, or motivation in the prior art that would have led one of ordinary skill to modify the prior art reference or to combine prior art reference teachings to arrive at the claimed invention.*

As the MPEP directs, all claim limitations must be considered in view of the cited prior art in order to establish a *prima facie* case of obviousness. See MPEP § 2143.03.

The Present Invention and Its Advantages

The method for producing a polarizing film according to the present invention comprises the step of dipping a polyvinyl alcohol film (in/on which iodine is adsorbed and oriented) in an aqueous solution containing boric acid and dipping and treating the polyvinyl alcohol film with the aqueous solution. The method is characterized in that an absorbance of the aqueous solution at a wavelength of 450 nm is maintained in a range of 0.13 or less. Accordingly, the method of the present invention can easily produce a polarizing film having a higher contrast than conventional polarizing films.

IDS with Partial English Translation of JP 2001-311827 (Matsumoto et al.)

On even date with the filing of the instant reply, applicants are also filing an IDS containing a fuller partial English translation of JP Publication No. 2001-311827 (Matsumoto et al.), which reference has been cited by the USPTO against the pending claims.

The newly filed English translation is similar to that earlier provided to the USPTO (and cited on PTO-SB08 filed on January 14, 2009) but additionally contains a translation of paragraph [0019] of the reference therein, in order to facilitate the USPTO's consideration of patentable distinctions over the same cited art reference (as explained below).

Accordingly, the USPTO Examiner is respectfully requested to consider the newly filed English translation of the JP 2001-311827 (Matsumoto et al.) at this time.

Distinctions over the Cited Art

Isozaki et al. US '960 discloses a method for producing a polarizing film and describe, in the Examples and the Comparative Examples, the concentrations of boric acid, potassium iodide and zinc chloride in an aqueous solution and a temperature (30°C) and a time (5 minutes dipping) for treating a film. However, **Isozaki et al. US '960** does not describe or teach any absorbance of an aqueous solution at a wavelength of 450 nm, or maintaining an absorbance of an aqueous solution at a wavelength of 450 nm in a specific range.

Matsumoto et al. JP '827 may describe the measurement of an absorbance of a layer of a polarizing film at a wavelength of 450 nm, however, **Matsumoto et al. JP '827** describes no measured value of the absorbance (*see paragraph [0018]*). Moreover, **Matsumoto et al. JP '827** does not describe any absorbance of an aqueous solution of boric acid (*see paragraph [0013]*).

The USPTO alleges/asserts in the office action that “[B]ecause **Matsumoto et al.** teach having boric acid, water, and iodine, for making polarizing film with high contrast, which results [in a] polarizing film at 450 nm, about 0 to 0.3 absorbance, it would have been obvious to one ordinary skill in the art ... to use similar chemical properties present in boric acid solution for making polarizing film for desired contrast.”

Accordingly, based on the above statement of the USPTO it appears that the USPTO may misunderstand the disclosures of **Matsumoto et al. JP '827** in the following two points:

Point (1):

Matsumoto et al. describes that an absorbance A at a wavelength of 450 nm and an absorbance B at a wavelength of 600 nm satisfy the following relationship:

$$0 \leq A/D \leq 0.3.$$

That is, the range of the ratio of the absorbance A at a wavelength of 450 nm to the absorbance B at a wavelength of 600 nm (A/D) is within the numerical range of "0 to 0.3."

However, **Matsumoto et al. JP '827** does not describe any absolute value of an absorbance at a wavelength of 450 nm or any other wavelength.

Furthermore, **Matsumoto et al. JP '827** never describes or teaches any relationship between the ratio of absorbance (such as A/D) and/or the absolute value of an absorbance (such as A), or decreasing the absolute value of an absorbance.

Point (2):

The spectral properties described by **Matsumoto et al. JP '827** are those of a colored layer of the polarizing film, but not those of a polarizing film as a whole. This is apparent from the following descriptions in paragraphs [0018] and [0019] (*emphasis added*):

The equations (I) to (IV) mean that, in the measurement of the absorption spectrum of the layer, a ratio of each of the absorbances A, B, C and E at 450 nm, 500 nm, 550 nm and 650 nm, respectively, to the absorbance D at 600 nm, in other words, a relative absorbance, can satisfy a specified relationship. To obtain a layer showing such a specified absorption spectrum, the layer is usually colored with a coloring agent such as a dye, a colorant or the like.
([0018])

A dye or a pigment used to form such a colored layer may have dichroism, but preferably has no dichroism. When a dye or a pigment having dichroism is used, it is important that the dye or pigment is not highly oriented in the colored layer. To satisfy the relationships (I) to (IV), one dye or pigment may be selected, or two or more dyes or pigments may be mixed for use.
([0019])

That is, **Matsumoto et al. JP '827** never describes or teaches that "an absorbance of the aqueous solution at a wavelength of 450 nm is maintained in a range of 0.13 or less."

Therefore, it is respectfully submitted that the above noted assertion/allegation of the USPTO is without basis and must be reconsidered.

Furthermore, based on the above facts and considerations, it is submitted that the present invention as claimed would not have been obvious from **Isozaki et al. US '960** in view of **Matsumoto et al. JP '827**, and consequently the outstanding rejections based on such references must be withdrawn at present. It is also noted that the combination of such references with the disclosure of **Tsuchimoto et al. US '939** does not cure the above noted deficiencies.

It is also noted that the cited art references (whether considered singularly or in combination) fail to provide any reason or rationale to those of ordinary skill in the art that would allow them to arrive at the instant invention as claimed, which fact also fully supports the nonobviousness of the instant invention over the cited art of record.

CONCLUSION

Based upon the amendments and remarks presented herein, the Examiner is respectfully requested to issue a Notice of Allowance clearly indicating that each of the pending claims 1-7 is allowable under the provisions of Title 35 of the United States Code.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact John W. Bailey, Reg. No. 32,881 at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

Application No. 10/538,492
Amendment dated September 2, 2009
Reply to Office Action of April 2, 2009

Docket No.: 0020-5382PUS1

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.17; particularly, extension of time fees.

Dated: September 2, 2009

Respectfully submitted,

By 

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